

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-17 were pending. By the present response, claims 1, 3, 6, 7, 14 and 15 have been amended and claims 18-28 have been added. Thus, upon entry of the present response, claims 1-28 remain pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims, and the specification, page 3, lines 15 and 26.

Entry of the foregoing is appropriate pursuant to 37 C.F.R. §1.116 for at least the following reasons. First, the amendments address the new grounds of rejection under 35 U.S.C. §112, second paragraph, thereby reducing the number of issues present upon appeal. Second, the amendments clearly overcome the grounds of rejection.

SPECIFICATION OBJECTION

The specification has been amended to address the noted typographical error on page 3 and page 4. Withdrawal of the rejection is respectfully requested.

CLAIM OBJECTIONS

Claims 6-10 are objected to because of the noted informalities. Claims 6 and 7 have been amended to address the objection and now recite cerium in agreement

with claim 1. Thus, reconsideration and withdrawal of the objection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claims 6-10 stand rejected under 35 U.S.C. §112, second paragraph on the grounds set forth in paragraph 4 of the Official Action.

By the present response, applicants have amended claims 6 and 7 in a manner which addresses the above-noted rejection. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 14-17 stand rejected under 35 U.S.C. §102(b) as being anticipated by Boakye et al., "Porous Aluminum Oxide and Lanthanum Phosphate Fiber Coatings" (hereafter "*Boakye et al.*") on the grounds set forth in paragraph 6 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

Independent claim 14 and dependent claims 15-17 recite that a sol comprises, *inter alia*, an aqueous phase, particles of a phosphate of one rare earth consisting of lanthanum, and then acid with a pK_a of at least 3, other than phosphoric acid, a lanthanum salt of which is soluble in water. The particles of phosphate are orthophosphates.

Boakye et al. discloses a sol of lanthanum phosphate. *Boakye et al.* also discloses that the lanthanum phosphate is obtained by peptization of a gel by nitric acid, which has a pK_a less than 3.

Comparing the disclosure in *Boakye et al.* to the claims at issue here, applicant respectfully asserts that an anticipatory rejection is improper because each and every feature of applicant's claim is not disclosed in *Boakye et al.* Specifically, *Boakye et al.* is silent as to a sol of lanthanum phosphate wherein particles of phosphate are orthophosphates. Furthermore, *Boakye et al.* only discloses the use of nitric acid in the preparation of the sol. Nitric acid has a pK_a lower than 3. Applicant's independent claim 14 recites both that the particles of phosphate are orthophosphates and that the sol comprises an acid with a pK_a of at least 3. Thus, because of the noted differences between the disclosure in *Boakye et al.* and applicant's independent claim, it is respectfully asserted that the cited reference does not disclose each and every feature of applicant's independent claim 14 and an anticipatory rejection is improper. Withdrawal of the rejection is respectfully requested.

The rejection of dependent claims 15-17 over the disclosure in *Boakye et al.* is also an improper anticipatory rejection for at least the same reasons as noted above. Accordingly, withdrawal of these rejections is respectfully requested.

Claims 1-2, 4 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,615,807 to Yates (hereafter "Yates") on the grounds set forth in paragraph 7 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

Applicant's independent claim 1 and dependent claims 2, 4 and 13 recite that a sol comprises, *inter alia*, an aqueous phase, particles of a phosphate of one rare earth consisting of cerium, and an acid other than phosphoric acid, a cerium salt of which is soluble in water. The particles of phosphate are orthophosphates.

Yates is directed to a sol of cerium and of another element which may be a rare earth. The cerium particles of *Yates* are disclosed as particles of cerium metaphosphate. See column 1, line 58. Further, as disclosed in Example 7, the sol of *Yates* has a pH of 2.7, e.g., a very acidic pH.

Comparing the disclosure in *Yates* to the claims at issue here, applicants respectfully note that *Yates* does not disclose each and every element as claimed. Specifically, *Yates* discloses particles of cerium metaphosphate and not cerium orthophosphates as recited in independent claim 1. Furthermore, the pH of *Yates* is very acidic at 2.7 whereas applicant's independent claim 4 recites the pH is at least 4.

Based on the above-noted differences, applicant respectfully asserts an anticipatory rejection is improper because the disclosure in *Yates* does not recite each and every element of applicant's claims at issue here. Accordingly, withdrawal of the rejection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Boakye et al.* on the grounds set forth in paragraph 10 of the Official Action.

Claims 6-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Yates* on the grounds set forth in paragraph 11 of the Official Action.

Claims 1-5 and 12-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Boakye et al.* as applied to claims 14-17 above, and further in view of U.S. Patent No. 5,858,465 to Hunt et al. (hereafter "*Hunt et al.*") on the grounds set forth in paragraph 12 of the Official Action.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Yates*, applied to claims 1-2, 4, 6-7 and 13 above, and further in view of U.S. Patent No. 4,942,697 to Khaladji et al. (hereafter "*Khaladji et al.*") on the grounds set forth in paragraph 13 of the Official Action.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Yates*, as applied to claims 1-2, 4, 6-7 and 13 above, and further in view of XP-002129788 to Shoji et al. (hereafter "*Shoji et al.*") on the grounds set forth in paragraph 14 of the Official Action.

For at least the reasons noted below, these rejections should be withdrawn.

Applicant respectfully notes that the disclosure in *Boakye et al.* and/or the disclosure in *Yates* are the primary references forming the basis for each of the rejections under 35 U.S.C. §103. However, the disclosures in each and every secondary reference proposed to be combined with the above-discussed primary references fail to overcome the above-noted deficiencies in the primary references.

Furthermore, applicant notes that the disclosure in *Yates* includes very large particles consisting of fibers of at least 10 microns long. See column 4, line 57. In contrast, applicant's new claims 19 and 28 recite that an average particle size of the particles of the phosphate is at most 200 nanometers. For at least this reason, claims 19 and 28 distinguish over the cited combinations.

In addition, the disclosure in *Hunt et al.* is cited merely for the disclosure of a combustion chemical vapor deposition method for the treatment of substrates, the disclosure in *Khaladji et al.* is concerned with rare earth solid compositions obtained by calcining precipitates and the disclosure in *Shoji et al.* merely concerns the use of sols as anticorrosion agent compositions. Accordingly, the disclosure in these cited

references cannot contribute to overcome the above-noted deficiencies in the primary references.

From the above, withdrawal of the rejections based on the combination of the above-noted references is respectfully requested because a *prima facie* case of obviousness has not been established. Namely, the proposed combination does not contain each and every element of applicant's claims. See MPEP §2143. Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. §103.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: April 30, 2004

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

By: 

Jeffrey G. Killian
Registration No. 50,891